

AMENDMENT TO THE CLAIMS

1-6. (Cancelled)

7. (Currently Amended) A computer-implemented method of learning with an automatic speech recognition system, the method comprising:

detecting a change to a word included in a collection of dictated text, the change
producing a changed version of the word;

utilizing a computer processor that is a component of a computing device to automatically
infer ~~inferring~~ whether the change is a correction or editing;

~~wherein inferring whether the change is a correction or editing includes comparing a~~
~~speech recognition engine score of the dictated text and of the changed text;~~

if the change is inferred to be a correction, selectively learning from the nature of the
correction without additional user interaction;

wherein selectively learning from the nature of the correction includes:

making a first determination as to whether ~~determining~~ if a user's pronunciation,
during an utterance that gave rise to the dictated text, deviated from
existing pronunciations known by the system, the utterance including an
utterance of said word as well as a related context word, and wherein
making the first determination comprises:

- ~~by doing a forced alignment of a wave that corresponds to the~~
utterance of said word and the related context word; based
on at least one context word, wherein ~~determining if the~~
user's pronunciation deviated from existing pronunciations
also includes identifying in the wave the pronunciation of
the corrected word; and

analyzing the forced alignment so as to identify a portion of the
wave that is the user's pronunciation of said word;

~~_____ generating a confidence score based at least upon a distance of the~~
~~_____ user's pronunciation of said word to each of a plurality of~~
~~_____ possible pronunciations;~~
~~_____ wherein the confidence score is calculated using the function~~
~~_____ $1/[d/f/\log(\text{len1}+\text{len2})]$, where d is the distance between the~~
~~_____ user's pronunciation of said word to one of said possible~~
~~_____ pronunciations, f is a frequency that the user's~~
~~_____ pronunciation of said word is pronounced, and len1 and~~
~~_____ len2 are values representing the length of phonemes;~~
~~_____ making a second determination as to whether said word is included in the existing~~
~~_____ lexicon known by the system; and determining if the corrected word exists~~
~~_____ in the user's lexicon.~~
~~_____ and if the second determination indicates that said the corrected word does exist in the~~
~~_____ existing user lexicon, and if the first determination indicates the user's~~
~~_____ pronunciation of said word is in said existing pronunciations known by the~~
~~_____ system, then selectively changing a parameter associated within the system with~~
~~_____ the user's pronunciation of said word;~~
~~_____ building a lattice based upon possible pronunciations of the corrected word and the~~
~~_____ recognition result;~~
~~_____ generating a confidence score based at least in part upon the distance of the~~
~~_____ pronunciation with the possible pronunciations; and~~
~~_____ wherein the confidence score is calculated using the function $1/[d/f/\log(\text{len1}+\text{len2})]$,~~
~~_____ where d is the distance between the recognized pronunciation and a best match in~~
~~_____ a lexicon, f is a frequency that the same pronunciation is pronounced, and len1~~
~~_____ and len2 are the lengths of phonemes in a new pronunciation and the closest~~
~~_____ pronunciation, respectively.~~

18. (Currently Amended) The method of claim 7, wherein generating the confidence score further comprises ~~and further comprising generating a~~ the confidence score based at least in part upon an comparison of ~~Acoustic-an acoustic Model-model score of the user's pronunciation of said word with acoustic model scores of the plurality of possible pronunciations.~~ of the pronunciation with the possible pronunciations.

19. (Currently Amended) The method of claim 7, further comprising comparing the ~~wherein selectively learning the pronunciation includes comparing the confidence score to a threshold.~~

20-31. (Cancelled)

32. (Currently Amended) The method of claim 7, wherein generating the confidence score based at least upon the distance further comprises generating based at least upon the distance as ~~calculated is calculated using a phone confusion matrix and Dynamic Time Warping.~~

33-36. (Cancelled)

37. (Currently Amended) A computer-implemented method of learning with an automatic speech recognition system, the method comprising:

detecting a change to a word included in a collection of dictated text, the change producing a changed version of the word;

utilizing a computer processor that is a component of a computing device to automatically

infer ~~inferring~~ whether the change is a correction or editing;

wherein inferring whether the change is a correction or editing includes comparing a

speech recognition engine score of the dictated text and of the changed text;

if the change is inferred to be a correction, selectively learning from the nature of the

correction without additional user interaction;

wherein selectively learning from the nature of the correction includes:

~~-making a first determination as to whether determining if a user's pronunciation,~~
~~during an utterance that gave rise to the dictated text, deviated from~~
~~existing pronunciations known by the system, and wherein making the first~~
~~determination comprises generating a confidence score based at least upon~~
~~a distance of the user's pronunciation of said word to each of a plurality of~~
~~possible pronunciations;~~

~~wherein the confidence score is calculated using the function~~

~~$1/[d/f/\log(\text{len1}+\text{len2})]$, where d is the distance between the user's~~
~~pronunciation of said word to one of said possible pronunciations, f is a~~
~~frequency that the user's pronunciation of said word is pronounced, and~~
~~len1 and len2 are values representing the length of phonemes;~~

~~-by doing a forced alignment of a wave based on at least one~~
~~context word, wherein determining if the user's pronunciation deviated~~
~~from existing pronunciations also includes identifying in the wave the~~
~~pronunciation of the corrected word; and~~

~~making a second determination as to whether said word is included in the existing~~
~~lexicon known by the system; and determining if the corrected word exists~~
~~in the user's lexicon, and if the corrected word does exist in the user~~
~~lexicon, selectively changing a parameter associated with the~~
~~pronunciation;~~

~~generating a confidence score based at least in part upon the distance of the~~
~~pronunciation with the possible pronunciations; and~~

~~wherein the confidence score is calculated using the function $1/[d/f/\log(\text{len1}+\text{len2})]$;~~

~~where d is the distance between the recognized pronunciation and a best match in~~
~~a lexicon, f is a frequency that the same pronunciation is pronounced, and len1~~
~~and len2 are the lengths of phonemes in a new pronunciation and the closest~~
~~pronunciation, respectively.~~

if the second determination indicates that said word does exist in the existing lexicon, and
if the first determination indicates the user's pronunciation of said word is in said
existing pronunciations known by the system, then selectively changing a
parameter associated within the system with the user's pronunciation of said word.

38. (Currently Amended) The method of claim 37, further comprising ~~wherein selectively~~
~~learning the pronunciation includes~~ comparing the confidence score to a threshold.